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Meeting Notes

Attendees:	See Attached List	Date/Time:	4/18/01
		Project No.:	50885
Place:	West Running Brook Middle School, Derry, NH	Re:	Resource Agency Meeting #12
		Notes taken by:	Bruce A. Tasker, VHB
		Reviewed by:	Jeff Brillhart, NHDOT

Charlie Hood opened the meeting explaining this meeting is a continuation of the regular monthly Natural Resource Coordination Meeting that the Department holds for various Resource Agencies and at which Department projects are discussed, and comments, questions and input are taken regarding the projects. Because of the importance of the I-93 project and the need to involve the public, the I-93 resource Agency meetings are being held locally along the corridor. Charlie had the Resource Agency personnel introduce themselves, and then turned the floor over to Mark Kern.

Mark Kern (EPA) presented a project to consider areas in the I-93 region that have high natural environmental value, but are susceptible to future development. A grant of $15,000 has been made available to the Audubon Society and Complex Systems of UNH to map, evaluate, and prioritize sites of high habitat value. Mark reviewed another project that was done a few years ago for the NH Estuary in the seacoast area, noting that this seacoast project might serve as a model for the I-93 project in terms of developing potential mitigation locations in the I-93 corridor area. Mark described maps, some of which showed all of the 19 towns in the seacoast area, while others showed individual towns in the seacoast study area.

This project was done in four phases:

- Phase 1 - identified land that was unlikely to be developed;
- Phase 2 – looked at the remainder of the land to see how favorable or likely it was to be developed;
- Phase 3 – looked at the resources and established how valuable they might be;
- Phase 4 – combined the maps together to a prioritization of the areas susceptible to development.

The first two phases consider how much risk there is that an area would be developed; the third phase determines how valuable certain areas are in terms of environmental resources; and the last phase establishes those areas of high value and with a potential high risk of development. This would then be used to develop an estuary program in the seacoast area with the local towns to establish priorities for land protection.

For the I-93 project, because of the small amount of money available, the focus most likely will be on Phase 3, identifying the resources and their values.

To rate the environmental value of the areas, five characteristics were considered in the Seacoast study relative to water quality buffers. In the first level, all the large wetlands and all the streams in the area were buffered with a 100 foot wide buffer area. The second level had to do with Wildlife Habitat. In the third level, locally important land was identified by working with the Towns and Conservation Commissions as to where they thought the most important resources were located. The Water Resources (those are mainly the high yield drinking water resources) was developed as the fourth level. Lastly, un-fragmented lands, which are basically lands that are not broken apart by large developments or large highways, were noted in the map base. These five characteristics were compiled, and mapping developed and overlaid, and the areas where characteristics intersected identify where the more valuable lands are located.

Rich Cook (Audubon Society) explained the Society's role in the study is to act as a conduit between the Resource Agencies, the local community organizations, and Complex Systems. Audubon will be asking for the useful information from all the organizations and agencies relative to the natural resources in a given area. Once the GIS maps are created, the communities and agencies that provided the data will review that information. Then the Resource Agencies will be asked to provide their input and the maps will be finalized. The Resource Agencies and the Local Conservation Commission will identify a priority list on what sites would be good as mitigation for the I-93 project.

Tony Grande then presented the plans developed to date for widening I-93 and reconstructing the Exit 3 interchange in the Windham area. Tony explained that the plans represent a more detailed design of the conceptual designs presented in the Rationale Report. He explained the typical cross section that shows a three-lane widening of I-93 and a four-lane widening of I-93. Tony noted that approximately a 60 to 90 feet area inside the median area is being reserved for a potential future rail line.

Two plans were shown for the entire section of I-93 from Exit 2 to the Windham / Derry Town line. The plans included a three-lane alternative and a four-lane alternative. Tony described the four-lane alternative, noting that the three lane and the four lane were similar in design except that the three-lane alternative would have one less travel lane in each direction and a smaller foot print of impacts.

This section covers approximately 4.5 miles through Exit 3. Heading NB from Exit 2, a truck lane is being considered due to speed reduction experienced by trucks. The truck lane would begin at the nose of the NB on-ramp from Exit 2 and end approximately 3000 LF to the north. The truck lane typical section would be a 12 ' lane and a 4' shoulder.

South of Exit 2, all widening was developed to the outside to minimize impacts to the Porcupine Brook area. North of the Exit 2 interchange, the widening of the NB barrel would shift towards the median due to the close proximity of Canobie Lake and homes adjacent to I-93 along Lake Shore Drive. A median area would be preserved to provide a minimum of 61' for a future rail line. The SB barrel would be widened to the west (to the outside). South of the NH 111-A crossing, the SB barrel transitions to be widened toward the median.

Prior to the Exit 3 NB off-ramp to NH 111 an auxiliary lane is proposed due to the high volume of traffic exiting and the need for a two-lane off-ramp.

In the Exit 3 interchange area, the NB barrel is proposed to be shifted westerly approximately 500 feet to allow for more separation (from 500 feet to almost 1,100 feet) between the new NB off-ramp signalized intersection and the existing NH 111-A signalized intersection.

As the SB barrel passes over NH 111, the alignment is shifted further to the inside (with the new bridge approximately 10 feet away from the old structure) to allow for the new bridge to be completed without hindering traffic on existing I-93.

Continuing north of Exit 3, the NB barrel shifts back onto the existing alignment and essentially holds the easterly or outside edge of the NB barrel with all widening to occur towards the median. A truck lane is proposed for traffic accessing I-93 NB from Exit 3. The truck lane would end in the vicinity of the weigh station. In the area of the weigh station, all widening occurs towards the median. In the vicinity of North Lowell Road, widening is to the outside for both barrels.

For the SB barrel, north of Exit 3, the widening continues to be on the median side, avoiding impacts to the Heron rookery and the SB weigh station. The Exit 3 SB off-ramp nose is located to allow exiting traffic to recognize the exit location. Moving the nose further to the south and shortening the ramp reduces the motorists' ability to see where the exit ramp is because of a long crest vertical curve that exists along the mainline.

Because of the widening of I-93, the Brookdale Road bridge will be replaced. Three concepts were developed:

- The first is an on-line alternative that essentially replaces the bridge on the existing alignment. The work would involve approximately 1100 feet of roadway and 250 feet of bridge. In order to construct this alternative, it is assumed that a temporary detour bridge and approaches would be needed along the south side of the existing bridge.

- The second concept is a variation of the first concept except that the need for a detour bridge would be eliminated, as access to Brookdale Road would be from Manor Parkway via a 1500-foot road. This concept needs to be compared with the first option relative to cost, impacts and acceptability to the Town.

- The third concept is an off-line alternative, which would construct a new bridge to the south of the existing and use the existing bridge to maintain traffic. This alternative requires approximately 1750 feet of roadway and 250 feet of bridge. Three homes would be acquired on the southeast side of the I-93/Brookdale Road crossing.

Relative to the Exit 3 interchange, there are essentially three components: NH 111, the SB ramps, and the NB ramps. Alternatives for these components can be mixed and matched with each other.

NH 111

For NH 111 the general design calls for a 5-lane section with additional lanes as necessary for turning or traffic management purposes. The proposed section includes 10-foot shoulders with sidewalks and grass panels. To the east, NH 111 will be connected to the Windham-Salem NH 111 improvement project.

There are several options for NH 111 west of the SB barrel. They include:

- A "full" relocation of NH 111 where NH 111 is relocated 400 to 500 feet north of existing NH 111 with the relocation extending to the Wall Street intersection. The intent of this alternative is to allow the existing section of NH 111 (2,500 feet) that is bypassed to be retained (to a point just east of the Castleton Drive) as a frontage road to provide access to the remaining businesses and properties. The bypassed portion of existing NH 111 would be connected to

relocated NH 111 opposite Wall Street. This alternative impacts 6 businesses and 3 houses resulting from the relocation of NH 111.

- A "partial" relocation alternative where a portion of NH 111 is relocated 100-200 feet north of existing NH 111 with the relocation ending east of the Wall Street intersection. The intent of this alternative is similar to the "full" relocation option to allow the existing section of NH 111 (2,000 feet) that is bypassed to be retained as a frontage road to provide access to the remaining businesses and properties. The bypassed portion of existing NH 111 would be connected to the new section of NH 111, and a portion of Garden Road would be reconstructed and connected to this intersection. A turnaround at the easterly end would allow vehicles to reverse direction on the dead-ended portion of NH 111. This alternative impacts 10 businesses and 3 houses resulting from the relocation of NH 111.

- An "on-line" alternative would provide for a 5-lane section as necessary to manage the traffic in the area of the SB ramp intersection and then transition back to the existing 2-lane section of NH 111 just west of Rocky Ridge Road. The raised median island would preclude left turns from entering existing drives adjacent to the signalized intersection with the SB ramps. The Castleton driveway may conflict with the free-flow right-turn lane for the NH 111 EB traffic traveling south on I-93 and consequently the driveway may need to be relocated. This "online" alternative would have impacts to the properties fronting NH 111 resulting from the reconstruction and widening.

SB Ramps

For the I-93 SB ramps it is proposed that I-93 SB traffic exiting to NH 111 EB or WB be accommodated by a diamond type ramp extending from the north to NH 111. For NH 111 EB traffic that desires to travel SB on I-93, a free-flow option is proposed. For NH 111 WB traffic that wants to travel southerly onto I-93 there is a free-flow option and a signalized double left turn option.

For the free-flow option, a single lane free-flow loop ramp located in the NW quadrant of the interchange is carried over NH 111 on a new bridge adjacent to the SB mainline bridge. The NH 111 EB to I-93 SB traffic merges with the NH 111 WB to I-93 SB traffic south of NH 111 and then this traffic merges with the I-93 SB mainline through traffic.

The signalized, double left turn option for the NH 111 WB to I-93 SB traffic involves a signalized intersection where the SB off ramp intersects with NH 111. The NH 111 WB traffic would turn left from a double-left turn lane at a signalized intersection and merge to a single lane. This lane, and the ramp for the NH 111 EB traffic, would then merge together south of NH 111 and proceed southerly as a two lane on-ramp before merging with the I-93 SB mainline through traffic.

NB Ramps

For the I-93 NB traffic exiting to NH 111 EB or WB, a diamond type ramp is proposed. The NB off-ramp is a two-lane ramp which transitions to a double-left turn lane and a single-right turn lane (with provision for a double right) at a signalized intersection with NH 111.

For the NH 111 EB to I-93 NB traffic, two options exist. One is a free-flow on- ramp, designed as a single lane free-flow loop ramp in the SE quadrant of the interchange. In this configuration the NB on-ramp for NH 111 WB traffic also utilizes a free-flow ramp. Both of the NB on-ramps are merged into one lane north of the Exit 3 interchange before merging with the I-93 NB mainline through traffic.

A second option for the NH 111 traffic wishing to go NB on I-93 involves a signalized intersection with NH 111. The NH 111 EB traffic would operate as a yield/signalized right-turn lane before turning onto the loop ramp layout. The NH 111 WB traffic would turn left from a double-left turn lane at the same signalized intersection (similar to the current configuration), however the loop ramp would be developed as two-lanes before merging to one lane and then merging directly with the I-93 NB mainline through traffic.

NH 111 w/NB ramps:

For the NH 111 corridor in the vicinity of the NB ramps the alignment and grade configurations for NH 111, under all options, are generally the same. For the NB ramp intersection area with NH 111, the existing NH 111 grade will be improved where traffic will be required to stop and start at the signals. NH 111 will be lowered approximately 4-5 feet to improve the steep grade. The bank and real estate businesses located on the north side of NH 111 are proposed to be removed given the conflicts they present in the interchange area and the widening and grade changes to NH 111.

QUESTIONS:

Comment: Is the truck lane NB from Exit 2 in addition to the 4-lanes on the NB barrel?

Tony Grande: Yes, a climbing lane is proposed along this section. The addition of the climbing lane actually results in an additional 4 feet of pavement because while there is an additional 12 foot lane, the 12 foot shoulder that would be proposed if there was no truck climbing lane is reduced to four feet with a truck climbing lane.

Comment: Will trees need to be taken down in order to widen the roadway?

Tony: Yes, some tree clearing will be required to widen the highway and reconstruct the interchanges.

Comment: What is the process and who makes the decisions on the sound barriers?

Charlie Hood: The various alternatives are modeled to project noise levels. The model takes into account topography, traffic volumes, distance of receptors, vegetation, etc., and the model is tested against existing conditions and noise levels measured in the field. Once high noise levels (66 decibels or higher) and receptors have been identified, abatement measures are considered. An economic analysis is done to consider the cost of the sound barrier with respect to the number of homes that would receive a benefit of at least a 5-decibel reduction in noise. Where barriers cost $30,000 or less per receptor, the Department would recommend barriers be installed. This is in keeping with state and federal guidelines. This study is part way through the evaluation process and a number of areas with high noise levels have been identified. The next step is looking to estimate the cost/benefits of the barriers.

Comment: Regarding the removal of trees, is there any consideration for how that affects noise and the visual impacts?

Charlie Hood: When the analysis is done, existing conditions are noted, and wherever trees are removed (or in some places, a berm or ledge outcropping that is blocking some of the sound is removed), the changed conditions are taken into consideration by the computer model. If, due to the economic criteria not being met, sound barriers are not proposed but an area was opened up to visually see more of the highway, privacy fences and landscaping may be considered. These are not built to the same standards as the noise barriers and probably wouldn't reduce the noise, but the visual impact would be reduced.

Comment: Construction of the I-93 improvements may ruin my well. Will that be evaluated?

Charlie Hood: The Study will take into account water supplies and potential impacts to water quality. Wells that are particularly vulnerable will have samples taken in an effort to see what the conditions are beforehand. The results can then be checked with what they will be afterwards. If your water supply is disturbed by the project, we will be responsible for correcting the problem.

Comment: How were the sound measurements taken?

Charlie Hood: The measurements were taken close to the homes to get a feel for what the noise would be in the neighborhoods close to the highway. Traffic was counted at the same time. Once the computer program accurately reflects the existing situation, the future conditions can be inputted and future noise levels predicted.

Comment: What times of day were the measurements taken?

Charlie Hood: The measurements were taken at different times during the day. We look to account for the worst case. For example, in the morning we test the SB side of I-93, that when the traffic is the heaviest and moving the fastest. If the highway is congested and the speeds are low, then the noise is most likely not as great. A general rule of thumb is, if you double the amount of traffic that's out there you get a 2 to 3 decibel increase in noise. There will be some variations in the traffic; however the traffic is not doubling from the morning peak to the afternoon peak, so the differences are not significant.

Comment: I am concerned that if my home is more visible from the highway, it may be more susceptible to intruders.

Charlie Hood: This is one reason for considering privacy fences, if a sound barrier is not proposed.

Comment: I am concerned that with the highway closer to my house and the house exposed to the highway, the value of the house will be affected. Who is responsible for that?

Charlie Hood: In terms of addressing noise impacts, the Department will follow State and Federal guidelines and regulations. This analysis and process is pretty consistent across the

state and throughout the country. Opinions on whether a barrier will add value to a property varies from owner to owner.

Comment I understand what you are saying about the noise, but my question is how this project affects the value of my property and the quality of my life. How do you address that?

Charlie Hood: There will be a public hearing which will be an official hearing chaired by members of the Executive Council. The Department will make a presentation as to their recommended alternative. Testimony will be taken regarding the merits of the project and the reasonableness of the design and amenities. As a result of the public hearing process the project will be approved or not, or altered as appropriate. The Department and the Executive Council members will listen to what your comments and determine how to respond to your concerns.

Jeff Brillhart: The public hearing is currently scheduled for February 2002. We will have another dozen or so public meetings similar to this one and there will be plenty of opportunities for folks to bring up their concerns relative to the project. The Department does have a methodology for evaluating many of these concerns. We try to treat everybody fairly and Charlie and his group will go out of their way to address concerns such as noise and well supplies. They are real concerns, and we will be building more sound barriers than ever as part of this project. However, we can't build them everywhere.

As far as what will the project do to the resale value of your home because the highway has been widened or your property has been exposed to the highway, that will not be evaluated and there will be no compensation proposed for that. If your property is directly impacted by the project as a result of land or easements being acquired for highway purposes, then the loss of value to your property will be considered as part of the appraisal done to acquire the land or easements. If your property is not directly impacted by the acquisition of land or easements, then no compensation will be proposed. We will do some landscaping, put up sound barriers, and put up privacy fences all in an effort to minimize impacts.

Comment: What's the timeline for construction to begin?

Jeff Brillhart: If all went well the Department hopes to have construction begin in 2004. The money is programmed and the schedule is aggressive.

Comment: Is rail something that will happen?

Jeff Brillhart: The rail is being considered as a potential future mode in this region because over the long-term highways alone will not be able to address our transportation needs. The highway needs to be widened. It needs to be safer than it currently is, and it needs some additional capacity. But 20 years from now, south of Exit 1, the traffic projections indicate that widening to even 4 lanes is not going to suffice. Consequently, the Department feels it is important to preserve the space (and to

build as much of the infrastructure as is reasonable) for the possibility of rail service within the I-93 highway corridor. The Department does not propose to institute train service as part of this project. Another study needs to be done to look at the potential of this rail corridor, as well as the abandoned rail corridor that currently exists between Manchester and Lawrence, Massachusetts. Given that rail technology is changing, it is difficult to say exactly how this will fit into our transportation future, but we think that rail will definitely be part of the transportation future.

Ken Kettenring: At last month's meeting I was correctly quoted in the meeting minutes, but I incorrectly stated that the rail study should be concurrent with the highway study, but does not necessarily have to be done as part of the highway study. I have since learned that NHDES's position is going to be that further study of rail options should be included in the EIS.

Comment Between Exit 2 and the Derry/Windham Town line are any homes, residences, buildings, or properties going to be acquired as part of the widening?

Tony Grande: There will likely be some property acquired. The majority of property and buildings that would need to be acquired will be in the interchange area.

Comment Under the worst case scenario, would that be six or eight properties?

Tony Grande: It could be that and more. The answer is not yet available. The number is affected by such things as retaining walls, sound barriers, detention and treatment ponds, utilities, etc. Until designs are refined to include these elements, the extent of property impacts will not be known.

Comment: Are we all automatically going to be informed of the date of this public hearing?

Charlie Hood: If you are an owner of property abutting the highway, you will automatically be notified.

Comment: Was there a notice in the paper for this meeting? We heard about it just by word of mouth. Most of us get the Lawrence Eagle Tribune.

Answer: It was in three papers, the Derry News, the Londonderry Times, and the Union Leader.

Comment Are you aware of the Exit 4A project and the options that are being considered?

Jeff Brillhart: The Department is working with the Towns of Derry and Londonderry, and meeting with them periodically to address technical issues. Because the Exit 4A project involves the interstate and is a major project, the towns have to write an EIS document similar to what we are doing for the I-93 project. The Federal Highway

Administration has to approve that document, so they are very much involved with the project as well

Comment: What will be presented at the next meeting?

Tony Grande: The next section will extend to the Stonehenge Road area.

Comment How close are you to the 66 decibels noise level in the Brookdale Road area on I-93 SB?

Tony Grande: I don't believe we have that information with us tonight. If you could see me afterwards, we can arrange to get that information to you.

Bruce Tasker: Just to add to that, one of things that we will be preparing is sound a contour map that will actually show a contour line with that 66 decibel noise level.

Comment Channel 17, the Salem Channel, would like to know if they could film the next meeting.

Jeff Brillhart: Yes they can.

Jeff Brillhart: The next meeting is in Windham, April 26th at 6:00 PM on Lowell Road, Windham Middle School. We will be presenting the same plans, and talking about project issues. Any additional information we have, we will present it at that time. Everybody is welcome. For future meetings, we will be back here in Derry on May 16th to talk about the next segment centered around Exit 4. We will then be in Londonderry on May 24th to present the plans to the Advisory Task Force and the public.